

What is claimed is:

1. A radiation image signal processing method,
comprising the steps of:

5 i) performing image position correcting processing
for correcting a low energy image signal and/or a high energy
image signal, such that a position of an image, which is represented
by the low energy image signal, and a position of an image, which
is represented by the high energy image signal, coincide with
each other, a pair of corrected original image signals being
thereby obtained,

10 ii) performing first energy subtraction processing
on the pair of the corrected original image signals, and

15 iii) performing second energy subtraction processing
with respect to the low energy image signal and the high energy
image signal,

wherein the second energy subtraction processing is
performed by the utilization of the pair of the corrected original
image signals, which have been obtained at the time of the first
energy subtraction processing.

20 2. A method as defined in Claim 1 wherein the pair
of the corrected original image signals, which have been obtained
at the time of the first energy subtraction processing, are stored,
and

25 the second energy subtraction processing is performed
by the utilization of the pair of the corrected original image
signals, which have thus been stored.

3. A method as defined in Claim 1 wherein the pair of the corrected original image signals, which have been obtained at the time of the first energy subtraction processing, are transferred to a certain destination, and

5 the second energy subtraction processing is performed at the transfer destination by the utilization of the pair of the corrected original image signals, which have thus been transferred.

10 4. A method as defined in Claim 1, 2, or 3 wherein the image position correcting processing is performed on only the high energy image signal.

15 5. A radiation image signal processing apparatus wherein:

20 i) image position correcting processing is performed for correcting a low energy image signal and/or a high energy image signal, such that a position of an image, which is represented by the low energy image signal, and a position of an image, which is represented by the high energy image signal, coincide with each other, a pair of corrected original image signals being thereby obtained,

ii) first energy subtraction processing is performed on the pair of the corrected original image signals, and

25 iii) second energy subtraction processing is performed with respect to the low energy image signal and the high energy image signal,

the second energy subtraction processing being

performed by the utilization of the pair of the corrected original image signals, which have been obtained at the time of the first energy subtraction processing.

6. An apparatus as defined in Claim 5 wherein the apparatus comprises:

a) common energy subtraction processing means for performing the first energy subtraction processing and the second energy subtraction processing,

b) storage means for storing the pair of the corrected original image signals, which have been obtained at the time of the first energy subtraction processing,

c) instruction means for outputting an instruction for performing the second energy subtraction processing, and

d) control means for controlling the common energy subtraction processing means in accordance with the instruction, which has been outputted from the instruction means, such that the common energy subtraction processing means performs the second energy subtraction processing by the utilization of the pair of the corrected original image signals, which have been stored in the storage means.

7. An apparatus as defined in Claim 5 wherein the apparatus comprises:

a) first energy subtraction processing means for performing the first energy subtraction processing,

b) second energy subtraction processing means for performing the second energy subtraction processing,

c) storage means for storing the pair of the corrected original image signals, which have been obtained at the time of the first energy subtraction processing,

d) instruction means for outputting an instruction for performing the second energy subtraction processing, and

e) control means for controlling the second energy subtraction processing means in accordance with the instruction, which has been outputted from the instruction means, such that the second energy subtraction processing means performs the second energy subtraction processing by the utilization of the pair of the corrected original image signals, which have been stored in the storage means.

8. An apparatus as defined in Claim 5 wherein the apparatus comprises:

a) first energy subtraction processing means for performing the first energy subtraction processing,

b) second energy subtraction processing means for performing the second energy subtraction processing,

c) instruction means for outputting an instruction for performing the second energy subtraction processing, and

d) control means for transferring the pair of the corrected original image signals, which have been obtained at the time of the first energy subtraction processing, to the second energy subtraction processing means, and controlling the second energy subtraction processing means in accordance with the instruction, which has been outputted from the instruction means,

